

**PENGARUH SUPLEMENTASI PAKAN SUMBER ENERGI  
DAN PROTEIN TERHADAP KONSUMSI DAN  
KECERNAAN NUTRIEN KAMBING  
BLIGON BUNTING**

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**INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh dan efisiensi suplementasi sumber energi dan protein terhadap pemenuhan kebutuhan nutrisi kambing Bligon bunting. Penelitian ini dilaksanakan di kelompok Wanita Tani Ngelosari Piyungan, Bantul. Materi yang digunakan dalam penelitian ini adalah 12 ekor calon indukan kambing Bligon dengan umur kebuntingan sekitar 3 bulan dan bobot badan 30-48 kg yang dibagi secara acak menjadi 3 kelompok perlakuan, yakni kelompok I (Kontrol/K) yang diberi pakan hijauan sesuai kebiasaan peternak, kelompok II (Perlakuan I/P1) diberi pakan hijauan sesuai kebiasaan peternak + 500 g suplemen sumber energi dan kelompok III (Perlakuan II/P2) diberi pakan hijauan sesuai kebiasaan peternak + 500 g suplemen sumber protein. Pemberian pakan dilakukan 2 kali sehari, yakni pada pagi hari pukul 06.30-08.30 dan sore hari pukul 15.30-17.30. Perlakuan pakan pada kambing dilakukan selama 8 minggu. Penelitian yang dilakukan terbagi dalam tiga tahapan. Tahap pertama adalah tahap adaptasi dan pendahuluan ternak terhadap perlakuan suplemen pakan yang diberikan dan berlangsung selama 2 minggu, kemudian dilanjutkan pada tahap kedua koleksi total yang meliputi koleksi pakan pemberian, sisa pakan, feses dan urin pada 10 hari terakhir perlakuan pakan. Tahap selanjutnya adalah analisis laboratorium yang dilakukan di Laboratorium Ilmu Makanan Ternak Fakultas Peternakan UGM. Analisis proksimat laboratorium meliputi analisis bahan kering (BK), bahan organik (BO), protein kasar (PK), lemak kasar (LK), serat kasar (SK), bahan ekstrak tanpa nitrogen (BETN) dan *total digestible nutrients* (TDN). Parameter yang diamati dalam penelitian ini meliputi komposisi kimia pakan suplemen, komposisi kimia pakan hijauan, konsumsi nutrisi dan pencernaan nutrisi. Data yang diperoleh selanjutnya diuji dengan analisis *one way ANOVA* dan dilanjutkan dengan uji Duncan Multiple Range Test (DMRT) apabila terdapat perbedaan. Hasil analisis menunjukkan suplementasi pakan belum dapat mempengaruhi konsumsi BK, BO, LK, SK, BETN dan TDN, tetapi dapat mempengaruhi konsumsi PK ( $P < 0,05$ ). Pencernaan BO, PK, SK, LK belum meningkat signifikan dengan suplementasi, namun dapat meningkatkan pencernaan BK, BETN dan TDN secara signifikan ( $P < 0,05$ ).

Kata kunci : kambing bligon, bunting, suplementasi pakan, konsumsi dan pencernaan nutrisi.

## **THE EFFECT OF SUPPLEMENTATION OF ENERGY AND PROTEIN SOURCES TO CONSUMPTION AND DIGESTIBILITY OF NUTRIENTS ON PREGNANT BLIGON GOAT**

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### **ABSTRACT**

This research was aimed to observe the effect and efficiency of supplementation of the energy and protein sources in order to fulfill the nutrient needs of pregnant Bligon goat. This research was conducted in Ngelosari Piyungan woman farmer group, Bantul. In current study, 12 heads of female Bligon goats with 3 months-age of pregnancy and body weight ranged from 30 to 48 kg randomly divided into 3 groups of treatment, which was consist of group I (control), which was fed forage according to the farmer's habit, group II (Treatment I/P1) which was fed forage according to the farmer's habit + 500 g energy source supplements and group III (Treatment II/P2) which was fed forage according to the farmer's habit + 500 g protein source supplements. Goat feeding was conducted two times a day, which was in the morning at 06.30-08.30 and evening at 15.30-17.30. Feed treatment on goats was conducted for 8 weeks. The research was divided into three stages. The first stage was the adaptation and preface stage of goats to the feed supplement treatment given and lasted for 2 weeks, then continued in the second phase which was the total collection includes collection of feeding, feces and urine goat in the last 10 days of feed treatment. The third stage was the laboratory analysis which was conducted at the Laboratory of Animal Feed Science Faculty of Animal Science UGM. Laboratory proximate analysis include analysis of dry matter (BK), organic matter (BO), crude protein (PK), crude fat (LK), crude fibre (SK), nitrogen free-extract (BETN) dan total digestible nutrients (TDN). Parameters observed in this research were chemical composition of feed supplements, chemical composition of forage feed, consumption and digestibility of nutrients. The obtained data were statistically analysed with one way ANOVA analysis and continued with DMRT test if there were differences. Results showed that feed supplementation was not influence the consumption of BK, BO, LK, SK, BETN and TDN, but it can significantly increase the consumption of PK ( $P < 0,05$ ). The digestibility of BO, PK, SK, LK was not increased significantly with supplementation, but can significantly increase the digestibility of BK, BETN and TDN ( $P < 0.05$ ).

Key word : Bligon goat, pregnant, feed supplementation, nutrient consumption, nutrient digestibility